

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A transmission line connecting structure comprising:
a plurality of connected transmission lines, each transmission line including a dielectric substrate, an electrode formed on a first side of the dielectric substrate, and a first slot having a predetermined width and formed in the electrode, ~~a plurality of such transmission lines being connected;~~

wherein ~~[[an]]~~ the electrode of a first transmission line of the plurality of connected transmission lines and ~~[[an]]~~ the electrode of a second transmission line of the plurality of connected transmission lines are positioned at a distance from one another to form a gap therebetween;

wherein a respective resonator is connected to each of the plurality of connected transmission lines so as to be able to couple with one another, one end of each respective resonator being open on a side thereof facing the gap;

wherein at least one stub for suppressing leakage of a first signal in the gap ~~between the plurality of electrodes~~ is provided in at least one ~~electrode of the electrodes~~ of the plurality of connected transmission lines;

and wherein, when the wavelength of a second signal in odd mode which propagates the plurality of connected transmission lines ~~line~~ is λg_{odd} , a length of the stub is approximately $\lambda g_{\text{odd}}/4$, and a length between the respective resonator and the stub is smaller than $\lambda g_{\text{odd}}/2$.

2. (Previously presented) The transmission line connecting structure according to claim 1, further comprising:

a second electrode formed on a second side of the dielectric substrate opposite the first side;

a second slot formed in the second electrode, the second slot having a predetermined width and opposing the first slot; and

a second resonator connected to the second electrode, one end of the second resonator being open on a side thereof facing the gap.

3. (Currently amended) A transmission line connecting structure comprising:

a plurality of connected transmission lines, each transmission line including a dielectric substrate, an electrode formed on a first side of the dielectric substrate, and a first slot having a predetermined width and formed in the electrode, ~~a plurality of such transmission lines being connected;~~

wherein ~~[[an]]~~ the electrode of a first transmission line of the plurality of connected transmission lines and ~~[[an]]~~ the electrode of a second transmission line of the plurality of connected transmission lines are positioned at a distance from one another to form a gap therebetween;

wherein a respective resonator is connected to each of the plurality of connected transmission lines so as to be able to couple with one another, one end of each respective resonator being open on a side thereof facing the gap;

wherein at least one stub for suppressing leakage of a first signal in the gap ~~between the plurality of electrodes~~ is provided in at least one ~~electrode~~ of the electrodes of the plurality of connected transmission lines;

and wherein when the wavelength of a second signal in odd mode which propagates the plurality of connected transmission lines ~~line~~ is λ_{g_odd} , a length of the stub is approximately $\lambda_{g_odd}/4$, and a length between the respective resonator and the stub is approximately $\lambda_{g_odd}/2$.

4. (Previously presented) The transmission line connecting structure according to claim 3, further comprising:

a second electrode formed on a second side of the dielectric substrate opposite the first side;

a second slot formed in the second electrode, the second slot having a predetermined width and opposing the first slot; and

a second resonator connected to the second electrode, one end of the second resonator being open on a side thereof facing the gap.

5. (Previously presented) A transmission/reception device comprising a transmission line connecting structure according to claim 1.

6. (Previously presented) The transmission line connecting structure according to claim 1, wherein an end portion of the at least one stub is in a circular arc shape.

7. (Previously presented) The transmission line connecting structure according to claim 1, wherein the at least one stub is folded back at a midpoint thereof.

8. (Previously presented) The transmission line connecting structure according to claim 1, wherein the at least one stub is circular in shape.

9. (Previously presented) The transmission line connecting structure according to claim 1, wherein the at least one stub has a fan shape.

10. (Previously presented) The transmission line connecting structure according to claim 3, wherein an end portion of the at least one stub is in a circular arc shape.

11. (Previously presented) The transmission line connecting structure according to claim 3, wherein the at least one stub is folded back at a midpoint thereof.

12. (Previously presented) The transmission line connecting structure according to claim 3, wherein the at least one stub is circular in shape.

13. (Previously presented) The transmission line connecting structure according to claim 3, wherein the at least one stub has a fan shape.

14. (Previously presented) A transmission line connecting structure comprising:
a transmission line including:
a dielectric substrate;
an electrode formed on at least one side of the dielectric substrate;
a slot having a predetermined width formed in the electrode;
a resonator provided in the electrode, one end of the resonator being open; and
a stub for suppressing leakage of a signal in the transmission line.

15. (Previously presented) The transmission line connecting structure according to claim 14, wherein, when a wavelength of a signal in an odd mode which propagates the transmission line is λ_{g_odd} , a length of the stub is approximately $\lambda_{g_odd}/4$, and a length between the resonator and the stub is smaller than $\lambda_{g_odd}/2$.

16. (Previously presented) The transmission line connecting structure according to claim 14, wherein, when the wavelength of a signal in an odd mode which propagates the transmission line is λ_{g_odd} , a length of the stub is approximately $\lambda_{g_odd}/4$, and a length between the resonator and the stub is approximately $\lambda_{g_odd}/2$.

17. (Previously presented) The transmission line connecting structure according to claim 14, wherein an end portion of the at least one stub is in a circular arc shape.

18. (Previously presented) The transmission line connecting structure according to claim 14, wherein the at least one stub is folded back at a midpoint thereof.

19. (Previously presented) The transmission line connecting structure according to claim 14, wherein the at least one stub is circular in shape.

20. (Previously presented) The transmission line connecting structure according to claim 14, wherein the at least one stub has a fan shape.